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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/669,554

09/25/2003

Wolfgang Rentzsch

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22428

7590

09/15/2005

FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

MONBLEAU, DAVIENNE N

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/669,554		RENTZSCH, WOLFGANG	
	Examiner		Art Unit	
	Davienne Monbleau		2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 2-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/11/04; 9/25/03</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Information Disclosure Statement

The IDS filed on 2/11/04 and 9/25/03 has been acknowledged and a signed copy of the PTO-1449 is attached herein.

Election/Restrictions

Applicant's election without traverse of Species 3 in the reply filed on 8/1/05 is acknowledged.

Claims 2-4 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/1/05.

Abstract

The abstract of the disclosure is objected to because it is not narrative in form; the current abstract is one run-on sentence (almost in Claim form.) Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

Claim 1 line 7 recites "said receiving device thereto" which has no grammatical connection to the rest of the claim.

Claim 1 lines 10-11 recites "said coding device or the two detectors ... for detecting". The coding device, however, has coding means and does not perform detection, but rather the coding means are detected. Correction is required.

Claim 7 recites the limitation "the light source" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 lines 5-6 recite "i.e. ..." which is indefinite because it does not provide a positive structural limitation.

Claim 12 recites the limitation "the capture region" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 line 7 recites "i.e. ..." which is indefinite because it does not provide a positive structural limitation.

Claim 20 line 7 recites "said receiving device thereto" which has no grammatical connection to the rest of the claim.

Claim 22 recites the limitation "the sequence of coding means" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "the region without coding means" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Examiner notes that the claims contain reference numbers throughout. Examiner suggests, however, at least with regards to the two detectors (6, 7) and coding means (5, 9), amending the claims using “first” and “second” to distinguish between the separate elements.

Examiner also notes that coding means (5, 9) each contain a plurality of code marks (for the retention positions and the non-retention positions.) Applicant should be sure to make this distinction in the claims ... for example in Claims 11-13. (This is another example how using the reference numbers can be confusing.)

Lastly, Examiner requests that Applicant review the claims for grammatical accuracy.

Claim Rejections - 35 USC § 112

Claims 1 and 5-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 lines 14-15 recites “said coding device being embodied in such a way that on the one hand”. This is indefinite language because it does provide a positive structural limitation.

Claim 1 line 16 recites “on the other hand”. This is indefinite language because it does provide a positive structural limitation.

Claim 20 line 12 recites “on the one hand ...”. This is indefinite language because it does provide a positive structural limitation.

Claim 20 line 14 recites “on the other hand ...”. This is indefinite language because it does provide a positive structural limitation.

A plurality of claims contains phrases such as “preferably ...”. These phrases are indefinite because they do not provide positive structural limitations. Correction is required.

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Claims 5-19 and 21-23 are rejected as being dependent on indefinite base claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

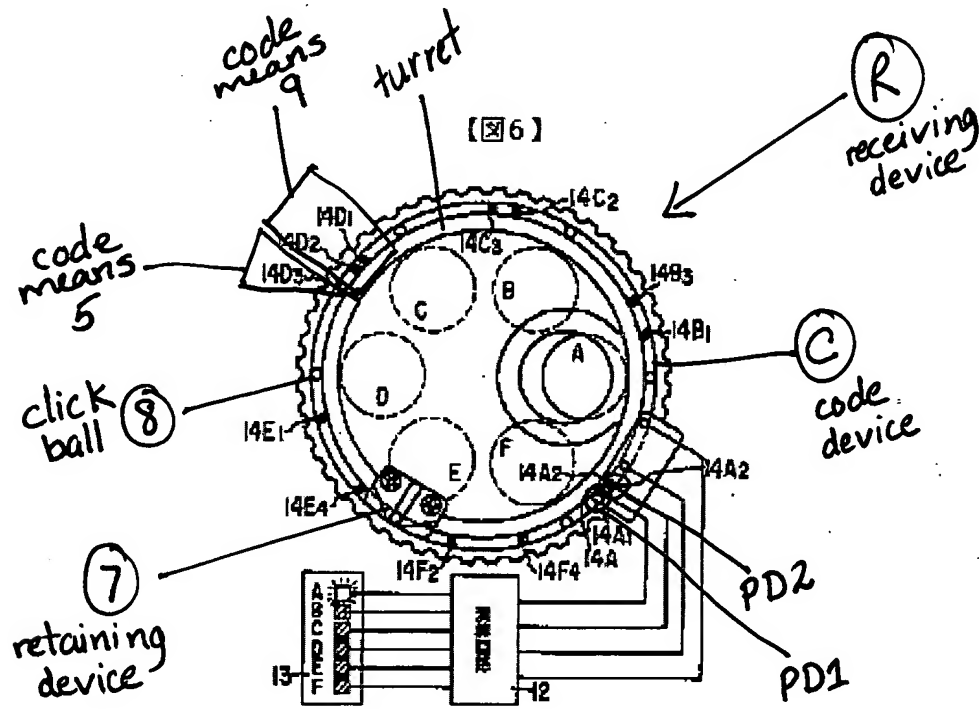
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 8-12, 16, and 18-23, to the extent taught and understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Yasushi (JP 2000-266986).

Regarding Claim 1, *Yasushi* discloses in Figures 1 and 6 an apparatus for positioning an optical component, arranged in a receiving device (R) together with several optical components (1A-1F), said apparatus comprising a receiving device (R) being rotatable about an axis and being retainable in several retention positions, said optical component being positionable in a corresponding retention position, a coding device (C) having coding means (14D1, 14D2, 14D3), and two detectors (PD1, PD2) detecting the coding means (14D1, 14D2, 14D3), said two detectors (PD1, PD2) being associated with said receiving device (R) for detecting position of said receiving device (R), and the two detectors (PD1, PD2) detecting coding means (14D1, 14D2, 14D3) at spatially different points, said coding device (C) being embodied in such a way that on the one hand the two detectors (PD1, PD2) detect coding means (14D1, 14D2) simultaneously when the receiving device (R) is located in a retention position, and on the other hand only one of the two detectors (PD1) detects coding means (14D3) when the receiving device (R) is located in a region between two adjacent retention positions. (See Figure 6 below. Please note that Examiner added some notation for clarity in the rejection.)

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Regarding Claim 20, the method of a device is not germane to the issue of patentability of the device itself, since the device itself obviously uses the method. Therefore the rejection used on the device applies also to the method of the device. See Claim 1 above.



Yasushi Fig. 6

Regarding Claim 5, *Yasushi* discloses in Figure 6 that coding means (14D1, 14D2, 14D3) are detectable optically.

Regarding Claim 6, *Yasushi* discloses in Figure 6 that the coding means (14D1, 14D2, 14D3) are reflective regions that are arranged substantially transversely to the motion direction of the receiving device (R).

Regarding Claim 8, *Yasushi* discloses in Figure 6 a retaining device (7) arranged in stationary fashion and retains the receiving device (R) in a retention position.

Regarding Claim 9, *Yasushi* discloses in Figure 6 that the retaining device (7) encompasses a ball (8), mounted with force impingement, that as a result of the force impingement presses into a locking notch provided on the receiving device (R). The retaining device (7) is a click spring and thus inherently uses force impingement with a notch.

Regarding Claim 10, *Yasushi* discloses in Figure 6 that the two detectors (PD1, PD2) are arranged with respect to one another in such a way that they detect the coding means (14D1, 14D2, 14D3) at an effective distance D.

Regarding Claim 11, *Yasushi* discloses in Figure 6 that the coding device (C) is embodied in such a way that in each retention position of the receiving device (R) there is provided, at the points of the coding device (C) detected by the detectors (PD1, PD2), a coding means (14D1, 14D2) which has an effective width B that is equal to the effective distance D of the detectors (PD1, PD2).

Regarding Claim 12, *Yasushi* discloses in Figure 6 that the coding device (C) is embodied in such a way that there is provided in each retention position of the receiving device (R), at the points of the coding device (C) detected by the detectors (PD1, PD2), a coding means (14D1, 14D2) which has an effective width B that is less than the width E of the capture region of the retaining device (7).

Regarding Claim 16, it is inherent that a motor device is provided that rotates or moves the receiving device (R).

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Regarding Claim 18, *Yasushi* discloses in Figure 6 a control device (12, 13, and 51) which processes detected signals of the two detectors (PD1, PD2). It is inherent that the control device also controls the motor device in order to align an optical component in a retention position.

Regarding Claim 19, *Yasushi* discloses in Figure 6 that the receiving device (R) encompasses a turret for the reception of microscope objectives.

Regarding Claim 21, *Yasushi* discloses in Figure 6 that an initialization of the apparatus for positioning an optical component is accomplished by rotation or motion of the receiving device (R) through at least one retention position, the detected signals of the two detectors (PD1, PD2) being detected and evaluated.

Regarding Claim 22, by detecting the particular optical component in the retention position, *Yasushi* discloses detecting the actual position of said receiving device.

Regarding Claim 23, *Yasushi* discloses that positioning of said receiving device (R) is controlled or adjusted by means of said position signal (i.e. moving the receiving device (R) until the desired optical component is in the retention position.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 13-15, and 17, to the extent taught and understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi.

Regarding Claim 7, *Yasushi* teaches in Figure 6 optical detection means comprising reflectors so it is inherent that there is a light source. *Yasushi* does not teach, however, switching a light source off when the receiving device (R) is located in a retention position. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to switch off the light source in *Yasushi* to conserve power.

Regarding Claims 13-15, *Yasushi* teaches a coding device (C) with coding means (14D1, 14D2, 14D3), as well as additional coding means for each retention position but does not teach separate coding means for the regions between retention positions. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to use additional coding means for the regions between retention positions to more accurately detect the position of the receiving device (R) which would assist in controlling the rotational speed of said receiving device (R). Determining the optimum spacing of all the coding means depends on how high of a resolution you desire.

Regarding Claim 17, *Yasushi* teaches a motor to control the receiving device (R) position but does not teach the particular type of motor. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to use a particular motor configuration in *Yasushi*, such as rotational inter-connected gears for its suitability in the particular device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure because they teach various microscope turret configurations for optical components with coding means for determining particular positions of the turret and optical components.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 571-272-1945. The examiner can normally be reached on Mon-Fri 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davienne Monbleau

DNM


DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800